

IN THE CLAIMS

1. (Original) A catheter system comprising:
a deflection region having a longitudinal axis and a length, the deflection region having a wall, the wall having at least two sections, each section having a specific density which is different from each other section, the wall sections configured to define a predefined deflection pattern when a force is applied to the deflection region.
2. (Original) The catheter system of claim 1, further comprising:
at least one longitudinal element provided within the wall of the deflection region, the longitudinal element being substantially axially aligned with the longitudinal axis of the deflection region and providing a directional bias to the deflection region.
3. (Original) The catheter system of claim 2, wherein the longitudinal element is made from a shape memory material.
4. (Original) The catheter system of claim 2, wherein the longitudinal element is a wire.
5. (Original) The catheter system of claim 2, wherein the longitudinal element is a flat shim.
6. (Original) The catheter system of claim 1, further comprising an actuator member provided to apply an actuation force to the deflection region.
7. (Original) The catheter system of claim 1, further comprising a rib along the wall.

8. (Original) The catheter system of claim 7, wherein the longitudinal member is provided within the rib.

9. (Original) The catheter system of claim 1, further comprising a body region having a body wall, the body region being attached to the deflection region.

10. (Original) The catheter system of claim 9, wherein the body wall defines a lumen and a conduit is provided within the lumen.

11. (Original) The catheter system of claim 10, wherein the conduit is located in the center of the lumen.

12. (Original) The catheter system of claim 11, further comprising a torqueable member provided within the lumen.

13. (Original) The catheter system of claim 12, wherein the torqueable member is located adjacent the conduit.

14. (Original) The catheter system of claim 12, wherein the torqueable member is located adjacent the body wall.

15. (Original) The catheter system of claim 10, further comprising a plurality of vanes adjacent the torqueable member.

16. (Original) The catheter system of claim 1, further comprising a distal region.

17. (Original) The catheter system of claim 16, wherein the distal region includes a treatment tip.

18. (Original) The catheter system of claim 1, further comprising a non-compressible element.

19. (Original) The catheter system of claim 9, further comprising a non-compressible element.

20. (Original) The catheter system of claim 18, wherein the non-compressible element is provided adjacent the wall.

21. (Original) The catheter system of claim 18, wherein the non-compressible element is provided within the wall.

22. (Original) The catheter system of claim 19, wherein the non-compressible element is provided adjacent the body wall.

23. (Original) The catheter system of claim 19, wherein the non-compressible element is provided within the body wall.

24. (Original) The catheter system of claim 19, wherein the non-compressible element is provided adjacent the wall and the body wall.

25. (Original) The catheter system of claim 19, wherein the non-compressible element is provided within the wall and the body wall.

26. (Original) The catheter system of claim 18, wherein the non-compressible element is a braided sleeve.

27. (Original) The catheter system of claim 18, wherein the non-compressible element is a coil.

28. (Original) A catheter system comprising:

a deflection region having a longitudinal axis and a length, the deflection region having a wall, the wall having at least two sections, each section having a specific density which is different from each other section,

at least one longitudinal element disposed within the wall of the deflection region, the longitudinal element being substantially axially aligned with the longitudinal axis of the deflection region and providing a directional bias to the deflection region, the different wall sections and the longitudinal element being configured to define a predefined deflection pattern when a force is applied to the deflection region.

Claims 29 - 44 (Cancelled).